

formation of said amorphous film comprising silicon.

49. A method according to claim 24 wherein $10t \geq T$ where t is a largest period of time selected among periods of time which have uneven values for plural times of said method, and where T is a period of time of the formation of said amorphous film comprising silicon.

50. A method according to claim 26 wherein $10t \geq T$ where t is a largest period of time selected among periods of time which have uneven values for plural times of said method, and where T is a period of time of the formation of said amorphous film comprising silicon.--

REMARKS

Reconsideration and allowance of this application are respectfully requested.

Claims 1-15 and 20-22 have been cancelled and new claims 23-50 are added. The new claims have been drafted to avoid the informalities noted under 35 U.S.C. 112, second paragraph with respect to the cancelled claims.

With respect to the rejection of the former claims under the Kozuka et al. reference, the following remarks are made. It is submitted Kozuka does not teach stopping supply of hydrogen gas into the chamber. Further, as described in column 6, lines 37 to 43 of Kozuka, Kozuka constantly maintain the film growing surface of the glass substrate and the interfaces between the N- and I-layers and between the I- and P- layers in a hydrogen plasma atmosphere. Contrary to this, the present invention as recited in new independent claims 23,

24, 26 and 28 stops supply of a discharge gas such as hydrogen gas and continues the stop of the supply of the discharge gas such as hydrogen gas during formation of an amorphous film comprising silicon. The formation of the amorphous film comprising silicon can be started under a stable discharge because generation of radio frequency discharge during supply of the discharge gas such as hydrogen gas is carried out just before the formation of the amorphous film comprising silicon. Further, because the stop of the supply of the discharge gas such as hydrogen gas is continued during the formation of the amorphous film comprising silicon as described above, it is possible to suppress the hydrogen gas from affecting the film quality, as described at page

15, lines 10-11 of the specification.

With respect to new independent claims 25, 27, 29 and 30, because supply of a hydrogen gas is started simultaneously with stopping supply of a silicon containing gas and because radio frequency energy is supplied to the hydrogen gas, self-bias caused by the radio frequency energy supplied to the hydrogen gas prevents a fine particle formed in a chamber during decomposition of the silicon containing gas by radio frequency energy from adhering to a film coated surface even after the stop of the supply of the silicon containing gas.

For the above reasons, it is urged the present invention as recited in new claims 23-50 attached hereto is distinguished and advantageous over the cited reference.

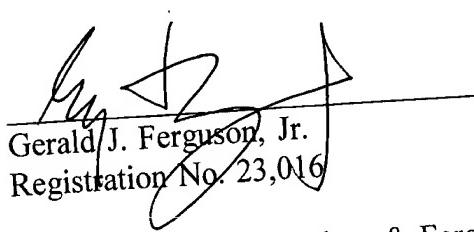
In view of the foregoing amendments and remarks, it is urged this case

Docket: 0756-1799

- 11 -

is now in condition for allowance and a notice to that effect is requested.

Respectfully submitted,


Gerald J. Ferguson, Jr.
Registration No. 23,016

Sixbey, Friedman, Leedom & Ferguson, P.C.
8180 Greensboro Drive, Suite 800
McLean, Virginia 22102
(703) 790-9110